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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/796,519	02/07/1997	HIROYUKI INOUE	684.2213-DIV	9056

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FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER

NGUYEN, LAM S

ART UNIT	PAPER NUMBER
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2853

MAIL DATE	DELIVERY MODE
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05/14/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

08/796,519

Applicant(s)

INOUE ET AL.

Examiner

LAM S. NGUYEN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 154-156, 158-164, 166-171, 173-176, 180, 207- 210, 212-215 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 154-156, 158-164, 166-171, 173-176, 180, 207- 210, 212-215 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 1997 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 08/519,730.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>1/22/07, 1/8/07, 6/15/06</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Substitute Specification

The content of the substitute specification was filed with the amendment dated 07/10/2001 could not be found. The examiner thus could not consider the substitute specification. Other substitute specification dated 02/06/2007 has been entered.

Information Disclosure Statement

The information disclosure statement filed 05/17/2006 fails to comply with 37 CFR 1.98(a)(1), which requires the following: (1) a list of all patents, publications, applications, or other information submitted for consideration by the Office; (2) U.S. patents and U.S. patent application publications listed in a section separately from citations of other documents; (3) the application number of the application in which the information disclosure statement is being submitted on each page of the list; (4) a column that provides a blank space next to each document to be considered, for the examiner's initials; and (5) a heading that clearly indicates that the list is an information disclosure statement. The information disclosure statement has been placed in the application file, but the information referred to therein has not been considered.

Either the information disclosure statement does not include the PTO 1449 form or the PTO 1449 form could not be found.

Claim Objections

Claims 161, 166, 167, and 212 are objected to because of the following informalities: The claim limitation "said other side" should be changed to "said second side" to avoid insufficient

antecedent basis. Appropriate correction is required and considered as not raising new subject matter.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 154-156, 162, 164, 166-169, 171, 173-176, 180, 208-210, 212-214 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oda et al. (US 5552816) in view of Takise (JP 4-32577).

Oda et al. discloses a liquid container (*FIG. 1, element 22*) for an ink jet recording apparatus, capable of containing liquid to be used by an inkjet head (*FIG. 1, element 16*), wherein said liquid container is detachably mountable to a holder (*FIG. 1, element 11*) having the ink jet head and an ink supply tube for directing liquid to the ink jet head (*FIG. 1, element 19*), said liquid container comprising:

a main body, provided with an ink accommodating member, for containing a liquid (*FIG. 1, element 22*);

a supply port (*FIG. 1, element 21a*) for supplying the liquid to the recording head, said supply port being disposed in a side which faces said ink supply tube (*FIG. 1, element 19*) when said liquid container is mounted in the holder (*FIG. 1, element 11*), wherein said ink accommodating member faces said ink supply port;

a first engaging portion (*FIG. 1, element 22a (left)*), provided on a first side of

said main body, adapted to engage with a first locking portion (*FIG. 1, element 13c (left)*) of the holder.

Oda et al. also discloses a second engaging portion provided on a second side of said main body that is opposite to the first side and adapted to engage with a second locking portion of the holder (*FIG. 1, elements 22a and 13c (right)*), wherein said supply port is disposed between the two engaging portions (*FIG. 1, element 21a*).

However, Oda et al. does not disclose an elastic supporting member having a second engaging portion at an outside thereof adjacent of a second side of said main body opposite of the first side adapted to engage with a second locking portion of the holder (**Referring to claim 154**), or a supporting member resiliently supported by said main body and being extended in front of a second side opposite said first side and having a second engaging portion at an outside thereof facing away from said second side of said main body and capable of moving away from and towards said second side which said second engaging portion is adapted to engage with the second locking portion of the holder (**Referring to claim 210**), wherein when said supporting member is provided with an operating portion for facilitating mounting or demounting said liquid container in the holder (**Referring to claim 162**), characterized in that said second engaging portion is in the form of a projection, having a height of approximately 1 mm, extended from said elastic supporting member and contactable to a part of the holder (**Referring to claims 164, 167**), wherein said supporting member is in the form of a latch lever which is extended downwardly from a portion adjacent to a top portion of said second side and which is spaced apart from said second side (**Referring to claims 166, 212**), wherein said supporting member resiliently moves toward said main body when said container is mounted or demounted relative

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to the holder (**Referring to claim 171**), wherein said second engaging portion is disposed between the neighborhood and an operating portion provided at a free end of said elastic supporting member (**Referring to claim 180**), wherein when said liquid container is mounted to the holder, said second engaging portion is inside the second locking portion of the holder, and is not extended outwardly (**Referring to claim 173**), wherein said latch lever is curved or bent toward said main body (**Referring to claim 208**).

Takise discloses a printing apparatus having an ink cartridge (*FIG. 3, element 51*) attached or detached on a holder (*FIG. 3, element 60*), wherein the ink cartridge has a first engaging portion is provided on a first side for pivotally holding the ink cartridge during mounting (*FIG. 3a, element 56*) and an elastic supporting member resiliently supported and being extended in front of another side of the ink cartridge (*FIG. 3a, element 55*). The elastic supporting member has a second engaging portion (*FIG. 3a, element 54*) at an outside thereof facing away from the side, capable of moving away from and towards the side, and adapted to engage with a locking portion (*FIG. 3a, element 69*) of the holder and an operating portion for facilitating mounting or demounting said liquid container in the holder provided at a free end of the elastic supporting member (*FIG. 3a-c, element 55*). The elastic supporting member is in the form of a curved or bent latch lever which is extended downwardly from a portion adjacent or a neighborhood to a top portion of a side and which is spaced apart from the side (*FIG. 3a-c: The side is a surface of the ink cartridge 51 where the elastic nail 55 is attached thereto*), wherein the second engaging portion is positioned between the neighborhood and the operating portion (*FIG. 3a-c, elements 54-55*), wherein the supporting member resiliently moves toward the main body of the ink cartridge 51 when the ink cartridge is mounted or demounted relative to the holder

(FIG. 3a-c: The elastic nail 55 moves toward the ink cartridge 51 to mount or demount the ink cartridge from the holder 60), wherein when the ink cartridge is mounted to the holder, the second engaging portion is inside the locking portion of the holder, and is not extended outwardly (FIG. 3b, elements 54, 69). In addition, since there is no evidence of the criticality of the height of the projection, the difference in the height of the prior art and claimed projections will not support the patentability of the claimed projection).

Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to replace one of two engagement portions disclosed by Oda et al. by the elastic nail and the other by the engaging portion for pivotally holding the ink container during mounting as disclosed by Takise. The motivation for doing so is to enable manipulation with a single hand to load and unload the ink cartridge to or from the holder with safety and ease as taught by Takise (*See page 8, third paragraph of the translation*).

- **Oda et al. also discloses the following claimed invention:**

Referring to claim 156: wherein said main body accommodates a negative pressure producing material for retaining the liquid (*column 9, lines 55-60*).

Referring to claim 155: wherein said liquid container comprises an air vent portion for fluid communication between the inside of said main body and the ambience (*column 9, lines 23-25, FIG. 1, element 23a*).

Referring to claims 168-169, 213-214: characterized in that a normal line from a central portion of said supply port to a line connecting a central portion of said first engaging portion and a central portion of said second engaging portion is not more than 10 mm (Since there is no

evidence of the criticality of the value of the distance, the difference in the length of the distance of the prior art and claimed structure will not support the patentability of the claimed invention).

Referring to claim 174: wherein an inclined surface is provided at a corner portion between a bottom side, in operation, of said main body and said first side (*FIG. 1: The inclined bottom surface of the ink container 22*).

Referring to claims 175-176: characterized in that said supply port and said elastic supporting member are protected by a protection member during transportation of said liquid container, and characterized in that said protection member has a sealing member for sealing said supply port of said a liquid container (Since the protection member is not part of the liquid container, the claimed element is considered but not given patentable weight).

Referring to claim 209: wherein said first engaging portion and said second engaging portion are engaged with said first locking portion and said second locking portion, respectively, to establish fluid communication by pressure between said ink accommodating member and said ink supply tube (*FIG. 1: The ink communication is established between the ink container 22 and the ink tube 19*).

2. Claims 158-161, 207 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oda et al. (US 5552816) in view of Takise (JP 4-32577), as applied to claims 154 and 210, and further in view of Baker et al. (US 4771295).

Oda et al., as modified, discloses the claimed invention as discussed above except wherein said supply port is provided with fibrous material, wherein said main body contains black ink, wherein the inside of said main body is divided into three portions disposed along a direction from said first side to said other side, and said supply port and said air vent portion are

provided for each of said three portions, and wherein said three portions contain yellow ink, cyan ink and magenta ink, respectively.

Baker et al. discloses a thermal ink jet pen body having an ink container (*FIG. 2*), wherein the ink container is either a single compartment black ink storage or a multiple ink (yellow ink, cyan ink, and magenta ink) storage compartment (*Abstract*). The ink storage has an ink supply port (*FIG. 2, elements 88, 90, 92*) provided with fibrous material (*FIG. 2, elements 36, 38, 40*) and an air vent (*FIG. 2, elements 70, 72, 74*). In addition, the inside of the multiple ink compartment storage is divided into three portions disposed along from one side to another side of the compartment (*FIG. 2, elements 42, 44, 46*), and the supply port (*FIG. 2, elements 88, 90, 92*) and the air vent portion (*FIG. 2, elements 70, 72, 74*) are provided for each of said three portions.

Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to modify the ink container disclosed by Oda et al., as modified, to contain black or color ink storages for color printing purpose and provide the air vent and the ink supply port with fibrous material for each ink storage as disclosed by Baker et al. The motivation of doing so is to provide an atmosphere pressure to ink and to provide good filtration of air bubbles and solid particles when inks passing from the ink storages to the ink pens as taught by Baker et al. (*column 2, lines 35-43*).

3. Claims 163, 170 and 215 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oda et al. (US 5552816) in view of Takise (JP 4-32577), as applied to claims 154 and 210, and further in view of Wada (EP 546832 A2).

Oda et al., as modified, discloses the claimed invention as discussed above, but is silent wherein said supply port is on a line connecting a central portion of said first engaging portion and a central portion of said second engaging portion, and when said container is mounted on the holder, said second engaging portion takes a position above said first engaging portion.

Wada et al. discloses an ink container having engaging portions and in ink supply port, wherein said supply port is on a line connecting central portions of said engaging portions (*FIG. 2*). In another embodiment, Wada et al. discloses an ink container having two engaging portions, wherein when said container is mounted on the holder, an engaging portion takes a position above the other (*FIG. 24, elements 1005a and 1007a*).

Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to modify the ink container disclosed by Oda et al., as modified, to locate the ink port on the line connecting the centrals of the engaging portions as disclosed by Wada et al. as a common or alternative structure well known in the art.

Response to Arguments

Applicant's arguments filed 01/22/2007 have been fully considered but they are not persuasive.

The applicant argued that Takise was not seen to disclose or to suggest that the elastic supporting member extended downwardly from a portion adjacent a top portion of said second side. The applicant also asserted that the elastic supporting member might extend upwardly instead. It is the examiner's point of view that as clearly shown in Takise's FIGs. 3(a)-3(c), the supporting member 55 is considered to extend downwardly from a portion 54 (adjacent a top portion (guiding groove 69) of the side of the cartridge holder 60) if the figures are turned 180

degrees (up-side-down). In other words, the extension of the supporting member 55 to be upward or downward is relative and depends on the direction of observation.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LAM S. NGUYEN whose telephone number is (571)272-2151. The examiner can normally be reached on 7:00AM - 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, STEPHEN D. MEIER can be reached on (571)272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Lam Son Nguyen', with a stylized, cursive script.

LAM SON NGUYEN